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(54) **Apparatus and method for deposition and inspection of chemical and biological fluids**

(57) An apparatus (100) and method are provided for producing and inspecting a plurality of deposited features (22) in a pattern on a portion of a substrate surface (21), as in an oligonucleotide array. The apparatus (100) comprises a printhead (10) for depositing a fluid to form the array of features (22) on the substrate surface (21) and a camera (50) for imaging the deposited features (22). The apparatus (100) also comprises a printhead controller (110) for positioning and activating the inkjet printhead (10) to deposit the array features (22). The camera (50), e.g., a digital line scan camera, is control-

led by a camera controller (150) such that the camera (50) acquires images corresponding to substantially only the portion of the surface (21) on which features should have been deposited. The camera (50) and printhead (10) are preferably situated such that an induced movement of the printhead (10) relative to the substrate (20) results in a substantially identical corresponding movement of the camera (150). Optionally, the apparatus (100) further comprises means for comparing an image acquired by the camera (50) with a predetermined standard to produce a signal.

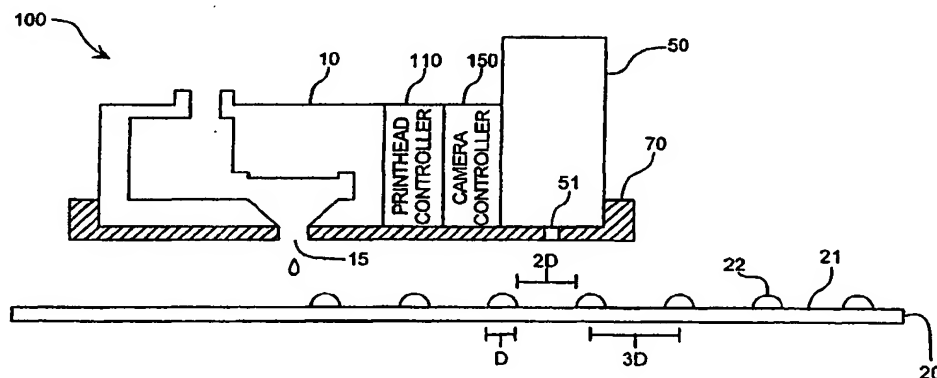


Figure 3



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| The present search report has been drawn up for all claims | | | |
| Place of search MUNICH | | Date of completion of the search 17 April 2003 | Examiner Nazario, L |
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